## Coordinated Science

## Class of 2018

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| Exam board information: Cambridge international GCSE in Coordinated Science, 0654 |

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| Course content: The Coordinated Science GCSE gives students a depth of understanding in all three Science disciplines, Biology, Chemistry and Physics and incorporated practicals skills into each of these subjects. The content of the syllabus is related to real world context to show students how Science impacts on our everyday lives. | | |
| Biology B1. Characteristics of living organisms  B2. Cells  B3. Enzymes  B4. Nutrition  B5. Transportation  B6. Respiration  B7. Co-ordination and response  B8. Reproduction  B10. Inheritance  B11. Energy flow in ecosystems  B12. Human influences on the ecosystem | Chemistry C1. The particulate nature of matter  C2. Experimental techniques  C3. Atoms, elements and compounds  C4. Stoichiometry  C5. Electricity and chemistry  C6. Energy changes in chemical reactions  C7. Chemical reactions  C8. Acids, bases and salts  C9. The Periodic Table  C10. Metals  C11. Air and water  C12. Sulfur  C13. Carbonates  C14. Organic chemistry | Physics P1. Motion  P2. Matter and forces  P3. Energy, work and power  P4. Simple kinetic molecular model of matter  P5. Matter and thermal properties P6. Transfer of thermal energy  P7. Waves  P8. Light  P9. Electromagnetic spectrum P10. Sound  P11. Magnetism  P12. Electricity  P13. Electric circuits  P14. Electromagnetic effects  P15. Radioactivity |

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| Skills that will be developed: The Coordinated science syllabus enables learners to:   * Better understand the technological world, with an informed interest in scientific matters * Recognise the usefulness (and limitations) of scientific method, and how to apply this to other disciplines and in everyday life * Develop an interest in, and care for, the environment * Better understand the influence and limitations placed on scientific study by society, economy, technology, ethics, the community and the environment * Develop an understanding of the scientific skills essential for both further study and everyday life. |

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| How the course will be assessed: All Candidates will be assessed in 3 exams:   * A multiple choice paper lasting 45 minutes, consisting of 40 marks which counts for 30% of the course. * A written paper consisting of short answers and longer structured questions lasting 2 hours. This counts for 50% of the overall grade. * An Alternative to practical exam, which is marked out of 60 and counts for 20% of the overall grade |

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| To be successful: Students must display several qualities:   * An excellent work ethic, both in lessons and out of school ensuring classwork and homework * Resilience when encountering difficult challenges, and not giving up when problems occur * Good literacy and numeracy skills. * An ability to work with others. |

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| Onward pathways: Co-ordinated science prepares students to continue their studies on the following courses:   * GCE A-level Biology * GCSE A-Level Chemistry * GCSE A-level Physics * Applied Science GCE Applied A-level |

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| Further information: The Website for the Co-ordinated Science qualification can be found here:  <http://www.cie.org.uk/programmes-and-qualifications/cambridge-igcse-sciences-co-ordinated-double-0654/>  Or contact Mr Dyson at St Ninian’s High school by email:  [nickdyson@snhs.sch.im](mailto:nickdyson@snhs.sch.im) |